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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,639	06/25/2003	Atsushi Minemura	P23877	1056

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EXAMINER

WYSZYNSKI, AUBREY H

ART UNIT	PAPER NUMBER
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2134

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/10/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary

Application No.

10/602,639

Applicant(s)

MINEMURA, ATSUSHI

Examiner

Aubrey H. Wyszynski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The response of 9/27/06 was received and considered.

Response to Amendment

2. Claims 1-4 and 6-20 are pending. Claim 5 is canceled.
3. Applicant has amended claim 20 to overcome the 35 U.S.C. 101 rejection to include a computer readable medium. However, applicant has not provided support from the specification for such an amendment.
4. Applicant has amended claims 1, 7, 8, 14 and 20 to overcome the 35 U.S.C. 112 2nd paragraph rejections. Therefore, those rejections are withdrawn.

Response to Arguments

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. The rejection of claims 1-20 have been further clarified below.

Priority

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

7. The information disclosure statement (IDS) submitted on 2/6/06 is being considered by the examiner.
8. The information disclosure statement (IDS) submitted on 12/12/06 is being considered by the examiner.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains new subject matter (computer readable medium) which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 1, 7, 8, 14, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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13. Claim 1 recites the limitation "user identification information" in lines 15-16.

There is insufficient antecedent basis for this limitation in the claim.

14. Claim 7 recites the limitation "user identification information" in line 9. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 8 recites the limitation "user identification information" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

16. Claim 14 recites the limitation "user identification information" in line 4. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 20 recites the limitation "user identification information" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Raith, USPN 5,241,598.

Regarding claims 1-3 and 5, Raith discloses device authentication system in which a first device/radio network or base station (fig. 1, B1-B10 and col. 14, lines 46-50), authenticates a second device/mobile station (fig. 1, M1-M10),

wherein the first device/network, comprises:

a transmission/reception section that transmits and receives information to/from the second device/mobile station, (col. 9, lines 48-50);

a first information holding section that holds first authentication information/permanent secret key A or S-key, in a secure area (col. 17, lines 37-44); and

a decider/controller, that makes a decision on authentication (col. 8, lines 62-66 and col. 9, lines 48-50),

the second device/mobile station comprises:

a transmission/reception (col. 9, lines 48-50) section that transmits and receives information to/from the first device/network;

a second information holding section that holds second authentication information/mobile identification number/ESN (col. 16, line 8);

an information acquirer that acquires third authentication information/secret key, from outside of the second device/mobile station (col. 16, line 63-col. 17, line 8), said third authentication information comprising user identification information/subscriber identity module (col. 16, line 68); and

an authentication information generator which generates fourth authentication information//RESP (col. 16, lines 2-10), from the second authentication information/ESN, and the third authentication information/MIN, and outputs the fourth authentication information/RESP, to the first device/network, through the transmission/reception section, (col. 17, lines 17-20) and

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wherein the decider/controller, makes a decision on conformity between the first authentication information/RAND, and the fourth authentication information/RESP, to authenticate the second device/mobile station (col. 16, lines 13-20); and wherein, when the first device/network, does not hold the first authentication information a device that performs mutual authentication with the first device/network, acquires the fourth authentication information from the second device/mobile station, and sets the first device/network, for the first authentication information as an initial setting (col. 18, line 49-col. 19, line 14).

Regarding claim 4, Raith discloses wherein the second authentication information is updated whenever the authentication processing is performed, and in accordance with the update of the second authentication information, the first authentication information held in the first information holding section in the first device is updated (col. 15, line 57-col. 16, line 5).

Regarding claim 6, Raith discloses wherein the third authentication/secret key, information is held in a predetermined device/network, that performs mutual authentication with the first device, and is provided from the predetermined device to the second device in authentication processing (col. 18, lines 49-55).

Regarding claim 7, Raith discloses a device authentication method (col. 18, lines 49-55)

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in which a first device/network, authenticates a second device/mobile station, the method comprising:

holding by the first device/network, first authentication information in a secure area/A or Skey (col. 17, lines 37-44),

holding by the second device, second authentication information/ESN and generating fourth authentication, information//RESP (col. 16, lines 2-10), from the second authentication information/ESN (col. 16, lines 2-13), and third authentication

information/secret key, provided from outside of the second device (col. 16, lines 63-66), the third authentication information comprising user identification information (col.

15, lines 65-col. 16, line 2), and the first device/network, makes a decision on conformity between the first authentication information and the fourth authentication information to authenticate the second device (fig. 4, and col. 18 line 55- col. 19, line 20), wherein,

when the first device/network, does not hold the first authentication information a device that performs mutual authentication with the first device/network, acquires the fourth authentication information from the second device/mobile station, and sets the first device/network, for the first authentication information as an initial setting (col. 18, line 49-col. 19, line 14).

Regarding claim 8, Raith discloses a second device/mobile station, to be authenticated by a first device/network that holds first authentication information in a secure area, the second device comprising: a transmission/reception section that transmits and receives

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information to/from the first device; an information holding section that holds second authentication information/ESN (col. 16, lines 7-8),
an information acquirer that acquires third authentication information/secret key, from outside of the second device/mobile station, the third authentication information comprising user identification information (col. 16, line 63-col. 17, line 8);
and an authentication information generator which generates fourth authentication information/RESP (col. 16, lines 2-10), from the second authentication information/ESN, and the third authentication information/secret key, and outputs the fourth authentication information/RESP, to the first device/network, through the transmission/reception section, (col. 17, lines 17-20) wherein, when the first device/network, does not hold the first authentication information a device that performs mutual authentication with the first device/network, acquires the fourth authentication information from the second device/mobile station, and sets the first device/network, for the first authentication information as an initial setting (col. 18, line 49-col. 19, line 14).

Regarding claim 9, Raith discloses wherein the transmission/reception section receives random information/RAND from the first device, and the authentication information generator encrypts the random information/RAND, using the fourth authentication information to transmit to the first device through the transmission/reception section (col. 16, lines 2-5).

Regarding claim 10, Raith discloses wherein the transmission/reception section

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receives the random information from the first device, and the authentication information generator encrypts the fourth authentication information using the random information to transmit to the first device through the transmission/reception section (col. 16, lines 2-5).

Regarding claims 11-13, Raith discloses further comprising: an update control section that controls update of information required for processing for authentication, wherein after authentication from the first device succeeds, substituting for the second authentication information, the update control section stores in the information holding section the random information as new second authentication information, generates key information that is new authentication information from the third authentication information and the random information, and has the first device hold the key information through the transmission/reception section (col. 7, line 60 – col. 8, line 52).

Regarding claim 14, Raith discloses a first device that authenticates a second device, the second device containing second authentication information acquiring third authentication information externally of the second device, the third authentication information comprising user identification information and generating fourth authentication information from the second and third authentication information the first device comprising:

a transmission/reception section that transmits and receives information to/from the second device/mobile station, (col. 9, lines 48-50);

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a first information holding section that holds first authentication information/changeable key input/ A or S key, in a secure area (col. 17, lines 37-44); and the decider/controller, makes a decision on conformity between the first authentication information/A or SKey, and the fourth authentication information/RESP, to authenticate the second device/mobile station (col. 16, lines 13-20) wherein, when the first device/network, does not hold the first authentication information a device that performs mutual authentication with the first device/network, acquires the fourth authentication information from the second device/mobile station, and sets the first device/network, for the first authentication information as an initial setting (col. 18, line 49-col. 19, line 14).

Regarding claim 15, Raith discloses further comprising: a random information generator that generates random information to transmit to the second device through the transmission/reception section (col. 15, lines 57-62), wherein the decider decodes (fig. 3, #129, 130, 136) information received in the transmission/reception section using the first authentication information, and makes a decision on conformity between the decoded information and the random information (col. 16, lines 13-20).

Regarding claim 16, Raith discloses the first device according to claim 14, further comprising: a random information generator that generates random information to transmit to the second device through the transmission/reception section, (col. 15, lines 57-62), wherein the decider decodes (fig. 3, #129, 130, 136) information received in the transmission/reception section using the random information, and makes a decision on

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conformity between the decoded information and the first authentication information (col. 16, lines 13-20).

Regarding claims 17-19, Raith discloses wherein after authentication of the second device succeeds, substituting for the first authentication information, the information holding section holds key information that is new authentication information received in the transmission/reception section, as new first authentication information (col. 7, line 60 – col. 8, line 52).

Regarding claim 20, Raith discloses a computer readable medium that stores a program for having a computer, which is integrated into a second device/mobile station, to be authenticated by a first device/network, perform the authentication, the computer readable medium:

a generating code segment that generates fourth authentication information/RESP (col. 16, lines 2-10), from the second authentication information/ESN, that the second device holds, and the third authentication information/secret key, acquired from outside of the second device the third authentication information comprising user identification information (col. 16, line 63-col. 17, line 8); requesting an issue of random information to the first device (col. 15, lines 57-65); and encrypting the random information received from the first device using the fourth authentication information to output to the first device (col. 16, lines 10-15) wherein, when the first device/network, does not hold the first authentication information a device that performs mutual authentication with the first

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device/network, acquires the fourth authentication information from the second device/mobile station, and sets the first device/network, for the first authentication information as an initial setting (col. 18, line 49-col. 19, line 14).

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

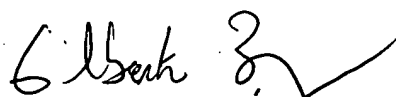
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aubrey H. Wyszynski whose telephone number is (571)272-8155. The examiner can normally be reached on Monday - Thursday, and alternate Friday's.

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21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHW


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